

# INTERNATIONAL SEARCH REPORT

Internal application No  
PCT/GB2005/000493

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B29B17/00 B29B13/02 B09B3/00 B29C39/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B29B B09B B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 240 656 A (SCHEERES ET AL) 31 August 1993 (1993-08-31)  the whole document	1-7, 11-22, 25-34
X	US 4 091 967 A (KINOSHITA ET AL) 30 May 1978 (1978-05-30) figures 6-10	1-10, 15, 23, 24
X	GB 2 297 553 A (STYROMELT LIMITED) 7 August 1996 (1996-08-07) figures 1-13	1-34
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

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Date of the actual completion of the international search

12 May 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 011, no. 131 (M-584), 24 April 1987 (1987-04-24) & JP 61 273913 A (MORUTON KK), 4 December 1986 (1986-12-04) abstract	1-7, 12-14, 25-34
X	PATENT ABSTRACTS OF JAPAN vol. 005, no. 083 (M-071), 30 May 1981 (1981-05-30) & JP 56 030822 A (WATANABE TOSHIRO; others: 05), 28 March 1981 (1981-03-28) abstract	1-7, 12-14, 25-34
X	US 5 470 521 A (WENZEL ET AL) 28 November 1995 (1995-11-28) figures 3,6	1-34
X	WO 91/07264 A (EXOTHERM PRODUCTS LTD) 30 May 1991 (1991-05-30) figures 2,4,5	1-34
X	PATENT ABSTRACTS OF JAPAN vol. 016, no. 425 (C-0982), 7 September 1992 (1992-09-07) & JP 04 146750 A (JANOME SEWING MACH CO LTD; others: 01), 20 May 1992 (1992-05-20) abstract	1-34
X	FR 2 715 852 A (FRANCON JEAN CLAUDE; LECEVALLIER FRANCOIS) 11 August 1995 (1995-08-11) figure 1	1-34
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 05, 30 June 1995 (1995-06-30) & JP 07 040345 A (IWAKUNI SEISAKUSHO:KK), 10 February 1995 (1995-02-10) abstract	1-34
X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 528 (C-1258), 6 October 1994 (1994-10-06) & JP 06 184351 A (YAMAMOTO MFG CO LTD), 5 July 1994 (1994-07-05) abstract	1-34
A	US 4 308 447 A (NOETZOLD ET AL) 29 December 1981 (1981-12-29) abstract	4,5, 16-19
A	US 5 814 790 A (BONDESON ET AL) 29 September 1998 (1998-09-29) abstract	4,5, 16-19

# INTERNATIONAL SEARCH REPORT

tion on patent family members

Internati application No  
PCT/GB2005/000493

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5240656	A	31-08-1993	AU 9019191 A EP 0556282 A1 WO 9208590 A1	11-06-1992 25-08-1993 29-05-1992
US 4091967	A	30-05-1978	JP 985448 C JP 52119687 A JP 54017353 B DE 2656484 A1 GB 1572623 A	29-01-1980 07-10-1977 29-06-1979 06-10-1977 30-07-1980
GB 2297553	A	07-08-1996	AU 4546096 A WO 9623640 A1	21-08-1996 08-08-1996
JP 61273913	A	04-12-1986	JP 1491839 C JP 63036924 B	07-04-1989 22-07-1988
JP 56030822	A	28-03-1981	NONE	
US 5470521	A	28-11-1995	US 5645862 A CA 2079636 A1	08-07-1997 11-04-1993
WO 9107264	A	30-05-1991	AU 6720990 A EP 0500667 A1 WO 9107264 A1 JP 5503669 T	13-06-1991 02-09-1992 30-05-1991 17-06-1993
JP 04146750	A	20-05-1992	NONE	
FR 2715852	A	11-08-1995	FR 2715852 A1 WO 9521633 A1	11-08-1995 17-08-1995
JP 07040345	A	10-02-1995	NONE	
JP 06184351	A	05-07-1994	JP 3121698 B2	09-01-2001
US 4308447	A	29-12-1981	DE 2836545 A1 FR 2434019 A1 GB 2031762 A ,B IT 1121913 B JP 1531787 C JP 55030996 A JP 63000209 B SE 444790 B SE 7902300 A	13-03-1980 21-03-1980 30-04-1980 23-04-1986 24-11-1989 05-03-1980 06-01-1988 12-05-1986 22-02-1980
US 5814790	A	29-09-1998	CA 2185278 A1 GB 2305996 A	05-04-1997 23-04-1997